Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-41 (canceled)

Claim 42 (previously presented): A method for obtaining expression of a tumor suppressor gene in a tumor cell in a mammal *in vivo*, wherein the tumor cell is caused by the absence of a tumor suppressor gene or the presence of a pathologically mutated tumor suppressor gene, the method comprising:

contacting the tumor cell with an effective amount of a replication-deficient recombinant adenovirus expression vector comprising: a) a partial or total deletion of a protein IX-encoding DNA sequence, and b) a gene encoding a foreign protein having a tumor suppressive function, wherein said contacting comprises intratumoral, peritumoral or intravesicular injection of the recombinant adenenovirus expression vector under suitable conditions such that the foreign protein is expressed in the tumor cell.

Claim 43 (currently amended): A method of inhibiting the proliferation of a tumor cell in a mammal, wherein the tumor cell is caused by the absence of a tumor suppressor gene or the presence of a pathologically mutated tumor suppressor gene, the method comprising:

administering to the mammal an effective amount of a replication-deficient recombinant adenovirus expression vector comprising: a) a partial or total deletion of a protein IX-encoding DNA sequence; and b) a gene encoding a foreign functional protein having a tumor suppressive function under suitable conditions to the ~~animal~~ mammal, wherein said administering comprises intratumoral, peritumoral or intravesicular injection of the replication-deficient recombinant adenenovirus vector under suitable conditions such that the foreign functional protein is expressed in the tumor cell.

Claim 44 (previously presented): The method of claim 42 or 43, wherein the tumor suppressor gene encodes a protein selected from the group p53, p21, p16, Rb, Wilm's tumor WT1 protein, h-NUC, mitosin and mito and p21.

Claim 45 (previously presented): The method of claim 42 or 43, wherein the tumor suppressor gene encodes p53.

Claim 46 (previously presented): The method of claim 42 or 43, wherein the gene is a suicide gene.

Claim 47 (previously presented): The method of claim 42 or 43, wherein the tumor cell is a member selected from the group consisting of non-small cell lung cancer, small cell lung cancer, hepatocarcinoma, melanoma, retinoblastoma, breast tumor, colorectal carcinoma, leukemia, lymphoma, brain tumor, cervical carcinoma, sarcoma, prostate tumor, bladder tumor, tumor of the reticuloendothelial tissues, Wilm's tumor, astrocytoma, glioblastoma, neuroblastoma, ovarian carcinoma, osteosarcoma, or renal cancer.

Claim 48 (previously presented): The method of claim 42 or 43, wherein deletion of the protein IX-encoding DNA sequence extends from about 3500 bp from the 5' viral termini to about 4000 bp from the 5' viral termini.

Claim 49 (previously presented): The method of claim 42 or 43, wherein the recombinant adenovirus expression vector further comprises a deletion of a non-essential DNA sequence in adenovirus early region 3 or early region 4.

Claim 50 (previously presented): The method of claim 42 or 43, wherein the recombinant adenovirus expression vector further comprises a deletion of DNA sequences designated adenovirus E1a and E1b.

Claim 51 (previously presented): The method of claim 42 or 43, wherein the recombinant adenovirus expression vector further comprises a deletion of early region 3 or 4 and DNA sequences designated adenovirus E1a and E1b.

Claim 52 (currently amended): The method of claim 51 ~~42 or 43~~, wherein the recombinant adenovirus expression vector further comprises a deletion of up to forty nucleotides positioned 3' to the site of the adenovirus E1a and E1b DNA sequence deletions ~~deletion~~, [[E1b,]] and the site of the partial or total deletion of the protein IX-encoding ~~deletions~~ sequence, and wherein said foreign functional protein comprises a polyadenlyation signal.

Claim 53 (previously presented): The method of claim 42 or 43, wherein the recombinant adenovirus expression vector is a Group C adenovirus selected from a serotype 1, 2, 5 or 6.

Claim 54 (previously presented): The method of claim 42 or 43, wherein the recombinant adenovirus expression vector is selected from the group consisting of A/C/N/53 and A/M/N/53.

Claim 55 (previously presented): The method of claim 42 or 43, further comprising administering a therapeutic agent that controls cell cycle progression and/or induces cell death.

Claim 56 (previously presented): The method of claim 42 or 43, wherein the mammal is a human.

Claim 57 (previously presented): A method for obtaining expression of a suicide protein in a cell, the method comprising administering to the cell an effective amount of a recombinant adenovirus expression vector comprising: a) a partial or total deletion of a protein IX-encoding DNA sequence, and b) a gene encoding a suicide protein, wherein an mRNA encoding the suicide protein is produced by the cell.

Claim 58 (currently amended): A method for reducing the proliferation of a tumor [[cells]] cell in a mammal, the method comprising administering under suitable conditions an effective amount of an adenoviral expression vector comprising: a) a partial or total deletion of a protein IX-encoding DNA sequence, and b) a gene encoding a suicide protein or a biologically active fragment thereof; and a therapeutic agent that in the presence of the suicide protein is toxic to the tumor cell.

Claim 59 (previously presented): The method of claim 58, wherein the therapeutic agent is a thymidine kinase metabolite or a functional equivalent thereof.

Claim 60 (previously presented): The method of claim 58, wherein the thymidine kinase metabolite is ganciclovir or 6-methoxypurine arabinonucleoside or a functional equivalent thereof.

Claim 61 (previously presented): The method of claim 58, wherein the adenoviral expression vector is administered by injection into the tumor mass.

Claim 62 (previously presented): The method of claim 58, wherein the tumor cell is hepatocellular carcinoma.

Claim 63 (previously presented): The method of claim 58, wherein the adenoviral expression vector is administered directly into the hepatic artery of the subject.

Claim 64 (canceled)

Claim 65 (previously presented): The method of claim 58, wherein the suicide protein is a functional thymidine kinase protein, a functional *E. coli DEO Δ* protein, or a functional cytosine deaminase protein.

Claim 66 (previously presented): The method of claim 58, wherein the recombinant adenovirus expression vector further comprises a deletion of a non-essential DNA sequence in adenovirus early region 3 or early region 4.

Claim 67 (previously presented): The method of claim 58, wherein the recombinant adenovirus expression vector further comprises a deletion of DNA sequences designated adenovirus E1a and E1b.

Claim 68 (previously presented): The method of claim 58, wherein the recombinant adenovirus expression vector further comprises a deletion of early region 3 or 4 and DNA sequences designated adenovirus E1a and E1b.

Claim 69 (currently amended): The method of claim 68 [[58]], wherein the recombinant adenovirus expression vector further comprises a deletion of up to forty nucleotides positioned 3' to the site of the adenovirus E1a and E1b DNA sequence deletions ~~deletion~~, [[E1b,]] and the site of the partial or total deletion of the protein IX-encoding ~~deletions~~ sequence, and wherein said foreign functional protein comprises a polyadenlyation signal.

Claim 70 (previously presented): The method of claim 58, wherein the recombinant adenovirus expression vector is a Group C adenovirus selected from a serotype 1, 2, 5 or 6.

Claim 71 (previously presented): The method of claim 58, wherein the recombinant adenovirus expression vector is selected from the group consisting of A/C/N/53 or A/M/N/53.

Claim 72 (previously presented): The method claim 58, further comprising administering a therapeutic agent that controls cell cycle progression and/or induces cell death.

Claim 73 (previously presented): The method of claim 58, wherein the tumor cell is a human tumor cell.

Claim 74 (previously presented): A kit for reducing the proliferation of tumor cells comprising the components of the adenoviral expression vector of claim 58, a thymidine kinase metabolite or functional equivalent thereof, pharmaceutical carriers and instructions for the treatment of hepatocellular carcinoma using the kit components.